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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,557	10/02/2006	Gerard Herman Hotho	NL 040657	1828

24737 7590 09/03/2009
PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER	
JACKSON, JAKIEDA R	

ART UNIT	PAPER NUMBER
2626	

MAIL DATE	DELIVERY MODE
09/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/599,557	HOTHO ET AL.	
	Examiner	Art Unit	
	JAKIEDA R. JACKSON	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the Office Action mailed March 4, 2009, applicant submitted an amendment filed on May 29, 2009, in which the applicant traversed and requested reconsideration.

Response to Arguments

2. Applicant's argue that the prior art cited does not specifically teach an encoder being operable when generating the down-mix output signals (i) to allow for subsequent decoding of the down-mix output signals (ii) for predicting (iii)(1) signals of channels processed and (iii)(2) then discarded within the encoder. Applicant's arguments are persuasive, but are moot in view of new grounds of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Craven et al. (USPN 7,193,538), hereinafter referenced as Craven in view of Thumpudi et al. (PGPUB 2004/0049379), hereinafter referenced as Thumpudi.

Regarding **claim 1**, Craven discloses a multi-channel encoder operable to process input signals conveyed in a plurality of input channels (channels) to generate corresponding output data comprising down-mix output signals (downmix) together with complementary parametric data, the encoder (abstract) including:

(a) a down-mixer for down-mixing the input signals to generate the corresponding down-mix output signals (downmix; column 6, lines 4-44); and

(b) an analyzer for processing the input signals, said analyzer being operable to generate said parametric data complementary to the down-mix output signals (downmix; column 6, lines 4-44 with column 7, lines 5-16), but does not specifically teach that said encoder being operable when generating the down-mix output signals (i) to allow for subsequent decoding of the down-mix output signals (ii) for predicting (iii)(1) signals of channels processed and (iii)(2) then discarded within the encoder.

Thumpudi disclose an encoder wherein said encoder being operable when generating the down-mix output signals (i) to allow for subsequent decoding of the down-mix output signals (ii) for predicting (iii)(1) signals of channels processed and (iii)(2) then discarded within the encoder (if the encoder drops one or more channels, one or more phantom channels based in decoded channels can be created; paragraphs 0362-0377), to improve quality.

Therefore, it would have been obvious to one of ordinary skill of the art at the time the invention was made to modify Craven's encoder as described above, to reconstruct the signal (paragraph 0369), which improves the quality and the overall listening experience (paragraph 0067), as taught by Thumpudi.

Regarding **claim 2**, Craven discloses a multi-channel encoder wherein said encoder being operable to process the input signals on the basis of time/frequency tiles (frequency; column 21, lines 5-20).

Regarding **claim 3**, Craven discloses a multi-channel encoder (encoder) wherein the tiles are defined either before or in the encoder during processing of the input signals (column 21, lines 5-20).

Regarding **claim 4**, Craven discloses a multi-channel encoder wherein the analyzer is operable to generate at least part of the parametric data (C.sub.1,iC.sub.2i) by applying an optimization of at least one signal (signal) derived from a difference between one or more input signals (difference) and an estimation of said one or more input signals which can be generated from output data from the multi-channel encoder (column 2, line 65 – column 3, line 3).

Regarding **claim 5**, Craven discloses a multi-channel encoder wherein the optimization involves minimizing an Euclidean norm (Euclidean; column 10, lines 21-55).

Regarding **claim 6**, Craven discloses a multi-channel encoder wherein there are N input channels (channels) which the analyzer is operable to process to generate for each time/frequency tile the parametric data, the analyzer being operable to output M(N-M) parameters together with M down-mix (downmix) output signals for representing the input signals in the output data; M and N being integers and M<N (column 6, lines 4-44).

Regarding **claim 7**, Craven discloses a multi-channel encoder according wherein the integer M is equal to two such the output signals (signals) are susceptible to being replayed in two-channel stereophonic apparatus (DVD) and being coded by a standard stereo coder (column 6, lines 4-44).

Regarding **claim 8**, Craven discloses a signal processor for inclusion in a multi-channel encoder (encoder), the processor being operable to process (downmix) data in the multi-channel encoder for generating its down-mix output signals and parametric data (column 6, lines 4-44).

Regarding **claim 9**, it is interpreted and rejected for similar reasons as set forth in claim 1.

Regarding **claim 10**, Craven discloses an encoded output data generated wherein said output data stored on a data carrier (storage medium; column 6, lines 62-67).

Regarding **claim 11**, Craven discloses a multi-channel decoder for decoding output data generated by a multi-channel encoder, the decoder comprising:

(a) processing means for receiving down-mix output signals (downmix) together with parametric data from the encoder, the processing means being operable to process the parametric data to determine one or more coefficients or parameters (column 6, lines 4-44); and

(b) computing means for calculating an approximate representation of each input signal encoded into the output data using the parameter data (computational) and also the one or more coefficients determined in step (a) for further processing to substantially

regenerate representations of input signals giving rise to the output data generated by the encoder (column 6, lines 4-44).

Regarding **claim 12**, Craven discloses a signal processor for use in a multi-channel decoder, said signal processor (processor) being operable to assist in processing data in association with regenerating representations of input signals (signals; column 24, lines 19-37).

Regarding **claim 13**, it is interpreted and rejected for similar reasons as set forth in claim 11.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAKIEDA R. JACKSON whose telephone number is (571)272-7619. The examiner can normally be reached on Monday-Friday from 5:30am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jakieda R Jackson/
Examiner, Art Unit 2626
August 30, 2009